

# How to engage and educate healthcare professionals and the public in antimicrobial stewardship

Dr. Jacqueline Sneddon, Glasgow, Scotland

EAHP Academy Seminar, Antibiotic Stewardship for Beginners

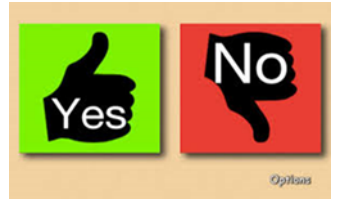


# Disclosure of Relevant Financial Relationships

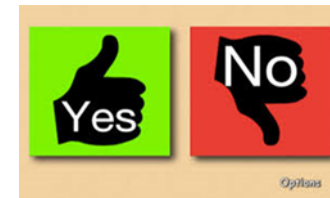
▶ NO DECLARATIONS

# Questions about education and engagement in antimicrobial stewardship

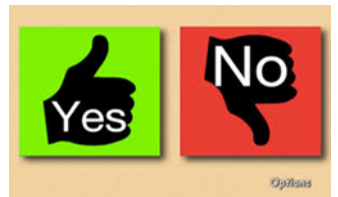
- ❖ Education of healthcare professionals is an important aspect of tackling AMR



- ❖ Healthcare staff will learn most about AMR through attending lectures



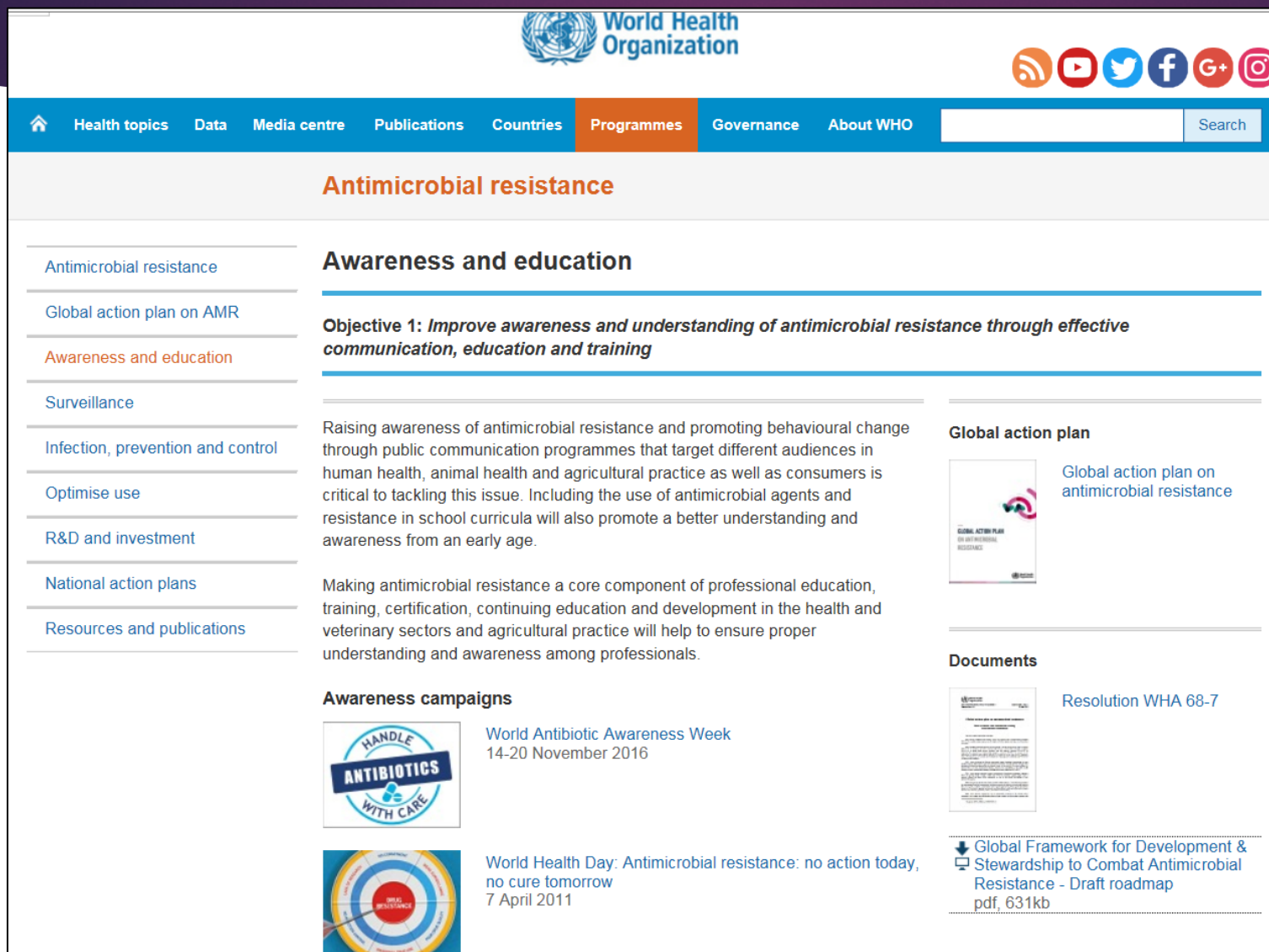
- ❖ Antibiotic awareness campaigns should only target patients and the public



# Overview of session

- ▶ Education resources available
- ▶ Engaging learners and changing behaviour
- ▶ The role of networks and champions in supporting education
- ▶ National campaigns for EAAD
- ▶ How patients and the public can support stewardship

# Education recognised as priority by WHO



The screenshot shows the WHO website's 'Antimicrobial resistance' page. The top navigation bar includes 'Health topics', 'Data', 'Media centre', 'Publications', 'Countries', 'Programmes', 'Governance', and 'About WHO'. The 'Programmes' tab is active. The main heading is 'Antimicrobial resistance', with a sub-heading 'Awareness and education'. A sidebar on the left lists various topics under antimicrobial resistance, with 'Awareness and education' highlighted. The main content area features an objective: 'Objective 1: Improve awareness and understanding of antimicrobial resistance through effective communication, education and training'. Below this, there are two paragraphs of text. The first paragraph discusses raising awareness through public communication programmes. The second paragraph discusses making antimicrobial resistance a core component of professional education. To the right, there are sections for 'Global action plan' (with a thumbnail of the 'Global action plan on antimicrobial resistance' document) and 'Documents' (with a thumbnail of 'Resolution WHA 68-7'). At the bottom, there are two awareness campaigns: 'World Antibiotic Awareness Week 14-20 November 2016' (with a 'HANDLE ANTIBIOTICS WITH CARE' logo) and 'World Health Day: Antimicrobial resistance: no action today, no cure tomorrow 7 April 2011' (with a target logo).

World Health Organization

Health topics Data Media centre Publications Countries Programmes Governance About WHO

Search

## Antimicrobial resistance

- Antimicrobial resistance
- Global action plan on AMR
- Awareness and education**
- Surveillance
- Infection, prevention and control
- Optimise use
- R&D and investment
- National action plans
- Resources and publications

### Awareness and education


**Objective 1: Improve awareness and understanding of antimicrobial resistance through effective communication, education and training**

Raising awareness of antimicrobial resistance and promoting behavioural change through public communication programmes that target different audiences in human health, animal health and agricultural practice as well as consumers is critical to tackling this issue. Including the use of antimicrobial agents and resistance in school curricula will also promote a better understanding and awareness from an early age.


Making antimicrobial resistance a core component of professional education, training, certification, continuing education and development in the health and veterinary sectors and agricultural practice will help to ensure proper understanding and awareness among professionals.

#### Awareness campaigns


 World Antibiotic Awareness Week  
14-20 November 2016

 World Health Day: Antimicrobial resistance: no action today, no cure tomorrow  
7 April 2011

#### Global action plan

 Global action plan on antimicrobial resistance

#### Documents

 Resolution WHA 68-7

Global Framework for Development & Stewardship to Combat Antimicrobial Resistance - Draft roadmap pdf, 631kb

<http://www.who.int/antimicrobial-resistance/en/>

# European network - ESGAP

European Society for  
Clinical Microbiology  
and Infectious Diseases

Antimicrobial  
stewardship group

<http://esgap.escmid.org/>


The screenshot displays the ESCMID website interface. At the top, there is a navigation bar with links for Home, Contact, Sitemap, and Disclaimer, along with social media icons for Facebook, Twitter, LinkedIn, and YouTube. The ESCMID logo, featuring a green grid icon, is positioned on the left, with the tagline 'MANAGING INFECTIONS PROMOTING SCIENCE' to its right. A search bar is located in the top right corner. Below the navigation bar, a horizontal menu contains several categories: MEMBERS & ORGANIZATION, RESEARCH & PROJECTS (highlighted in yellow), PROFESSION & CAREER, ESCMID PUBLICATIONS, DATES & EVENTS, and NEWS & MEDIA. To the right of this menu is the ECCMID logo. The main content area is divided into two columns. The left column, under the 'Research & Projects' header, lists various resources under the 'Study Groups' section, including 'Antimicrobial stewardship', 'Presentations & Publications', 'ABC Calc (AMC Tool)', 'Executive Committee', 'Mission & Objectives', 'Links', 'Statutes & Membership', 'Newsletters', 'ESGAP membership application', and 'Biofilms'. The right column features a large banner image of a laboratory setting with a red overlay that reads 'ESCMID FIGHTING ANTIMICROBIAL RESISTANCE'. Below the banner, the text reads 'ESCMID Study Group for Antimicrobial stewardship - ESGAP'. Underneath this, there is a 'News & Activities' section with a date '11 May 2017' and the headline 'ESGAP has a new name'. The text below the headline states: 'Antimicrobial stewardship has now become standard terminology (in English) worldwide to describe a set of actions/a programme aiming at ensuring responsible antibiotic use. ESGAP has changed its name accordingly from ESCMID Study Group for Antibiotic Policies to ESCMID Study Group for Antimicrobial stewardship.' To the right of the main content area, there is a 'LOGIN' section with input fields for 'Web ID or email address:' and 'Password:', and buttons for '+ LOGIN' and '+ Forgot password'. Below the login section is a 'NEW MEMBERSHIP' section with a '+ REGISTER NOW' button. At the bottom right, there is a dropdown menu with the text '..... ESGAP' and a downward arrow. The footer of the page contains the text 'ESCMID NEWS FTTR SIGN'.

# European network - ESGAP

Multi-professional  
resources available

Membership from  
38 Euros per year

<http://esgap.escmid.org/>



## Antimicrobial Stewardship Open Virtual Learning Community


AS-OVLC Principles of Antimicrobial Use AS Interventions Implementation of AS Education / Training Research

Login

- ◆ Login
- ◆ Forgot password
- ◆ Registration

### Antimicrobial Stewardship Staffing: Let's Have the Tiger by the Tail

By Celine Pulcini | 3 August, 2017 | No Comments




It is time we got serious about tackling bacterial resistance. Funding priority is given to innovation (new diagnostics and new antibiotics), while ensuring sustainable and sufficient funding of antibiotic stewardship ...

[Continue Reading](#) →

### Access, Watch and Reserve Antibiotics in the WHO Essential Medicines List

By Celine Pulcini | 17 July, 2017 | No Comments



WHO has released its updated Essential Medicines List, for adults and children (See here). The Antibiotics' list has been completely updated,

Email \*

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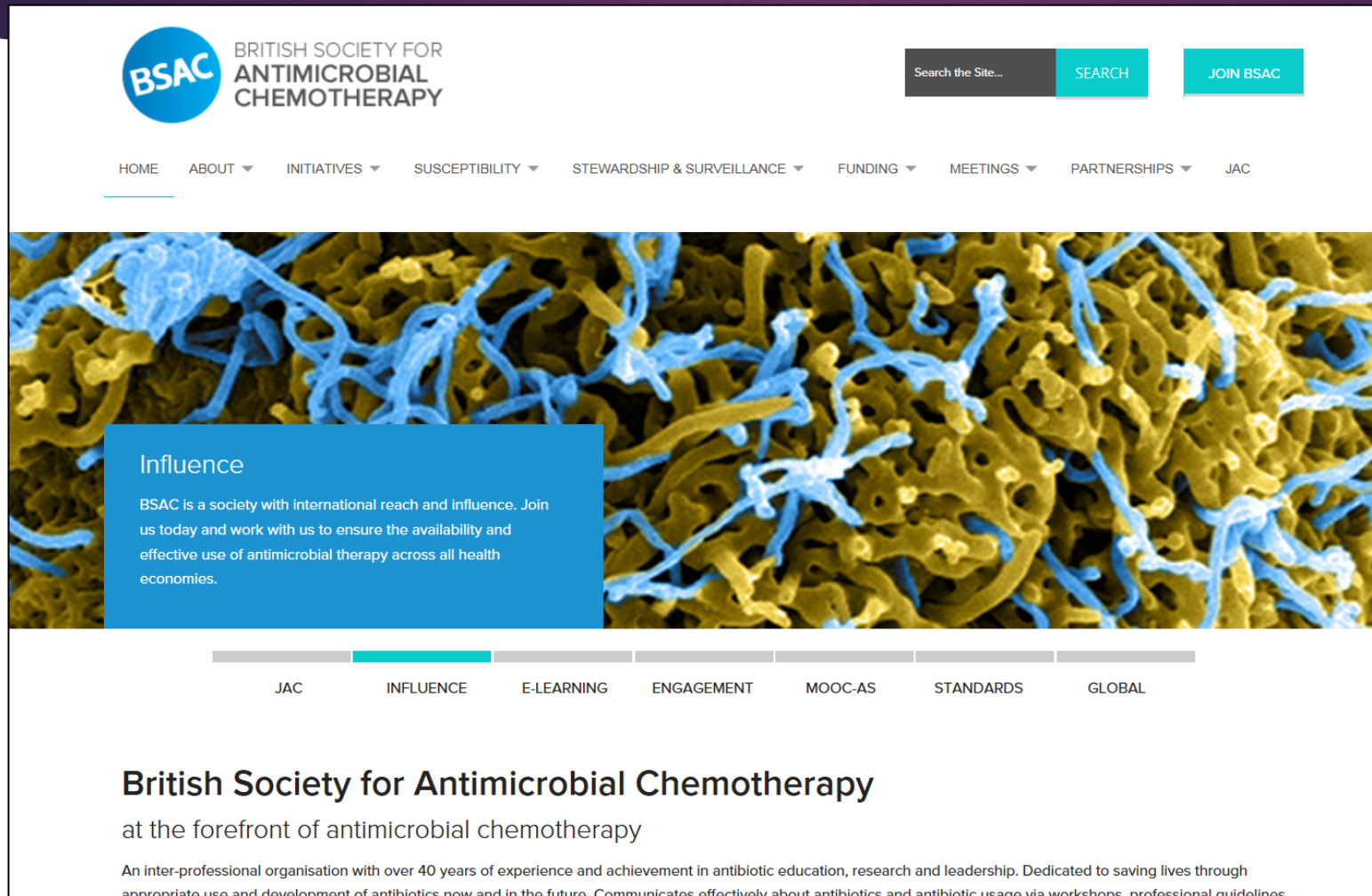
#### Site Navigation

- ◆ Home Posts
- ◆ Posts RSS
- ◆ Comments RSS

#### Post Categories

- ◆ Articles & Journal Club (34)
- ◆ Debates (10)
- ◆ Events (24)
- ◆ News (34)
- ◆ OVLC (1)
- ◆ Resources (19)
- ◆ Surveys (7)
- ◆ Uncategorized (6)

# British Society for Antimicrobial Chemotherapy (BSAC)



The screenshot shows the BSAC website homepage. At the top left is the BSAC logo, a blue circle with 'BSAC' in white, followed by the text 'BRITISH SOCIETY FOR ANTIMICROBIAL CHEMOTHERAPY'. To the right is a search bar with 'Search the Site...' and a 'SEARCH' button, and a 'JOIN BSAC' button. Below the header is a navigation menu with links: HOME, ABOUT, INITIATIVES, SUSCEPTIBILITY, STEWARDSHIP & SURVEILLANCE, FUNDING, MEETINGS, PARTNERSHIPS, and JAC. The main content area features a large image of blue and yellow microbial structures. A blue box on the left contains the text: 'Influence BSAC is a society with international reach and influence. Join us today and work with us to ensure the availability and effective use of antimicrobial therapy across all health economies.' Below the image is a horizontal menu with tabs: JAC, INFLUENCE (highlighted), E-LEARNING, ENGAGEMENT, MOOC-AS, STANDARDS, and GLOBAL. At the bottom, the text reads: 'British Society for Antimicrobial Chemotherapy at the forefront of antimicrobial chemotherapy. An inter-professional organisation with over 40 years of experience and achievement in antibiotic education, research and leadership. Dedicated to saving lives through appropriate use and development of antibiotics now and in the future. Communicates effectively about antibiotics and antibiotic usage via workshops, professional guidelines.'

Journal of Antimicrobial  
Chemotherapy

Educational events and on-  
line resources

Strategy includes supporting  
global education to tackle  
AMR

<http://bsac.org.uk/>



# British Society for Antimicrobial Chemotherapy (BSAC)

The screenshot shows the Future Learn website interface. At the top left is the Future Learn logo. Navigation links for 'Categories', 'Courses', 'Programs', and 'Degrees' are in the top center. A search icon and a 'Sign in' button are on the top right. The main content area features the course title 'Antimicrobial Stewardship: Managing Antibiotic Resistance' under the heading 'ONLINE COURSE'. Below the title is a brief description: 'Understand antibiotic resistance, and how antimicrobial stewardship can slow down or reduce it, with this free online course'. To the right of the description are two logos: the University of Dundee and the BSAC (The British Society for Antimicrobial Chemotherapy). Below these logos are two buttons: 'Join free' and 'Upgrade - £59'. A link 'What's the difference?' is positioned below the buttons. At the bottom of the page, there is a navigation bar with links for 'Overview', 'Topics', 'Start dates', 'Requirements', and 'Educators'. A 'Support' button is located in the bottom right corner. The URL 'futurelearn.com/' is visible in the bottom left corner.

Future Learn

Categories Courses Programs Degrees

Search Sign in

ONLINE COURSE

## Antimicrobial Stewardship: Managing Antibiotic Resistance

Understand antibiotic resistance, and how antimicrobial stewardship can slow down or reduce it, with this free online course

University of Dundee BSAC The British Society for Antimicrobial Chemotherapy

Join free Upgrade - £59

[What's the difference?](#)

Overview Topics Start dates Requirements Educators

futurelearn.com/ Support

Free 6-week course involving 3 hours study per week

Interactive and includes discussion with other learners

# Health Education England resource

The screenshot shows the e-LfH website interface. At the top left is the e-LfH logo with the tagline 'e-Learning for Healthcare'. To its right is a quote: 'An extraordinary project in terms of breadth and skill of content' attributed to 'e-Learning Age - Judges citation'. Further right is a 'Register / Log In' button and the NHS Health Education England logo. A blue navigation bar contains links for Home, Programmes, About, Latest News, Support, Demo, and Contact Us, along with a search bar. The main content area features a large purple banner for 'Reducing Antimicrobial Resistance' with a sub-headline: 'An e-learning package to support staff in understanding the threats posed by antimicrobial resistance'. To the right of the banner is a microscopic image of a bacterium. Below the banner is a 'Menu' section with radio buttons for: Antimicrobial Resistance, Resources for all staff working in health and social care, Resources for all staff working in primary care (including GPs), Meet the team, Open access session (selected), and How to access. The 'Open access session' section contains a disclaimer: 'Please note that if you access the content below your progress and completion will not be recorded and you will not be able to generate a record of completion. If you are a health or social care professional and require evidence of learning, please register for access and then log in to access this programme on the e-LfH Hub.' Below this is a description of the session: 'This session provides key facts about antimicrobial resistance and describes the important role everyone working in a health and care environment has in tackling it. It also discusses relevant aspects of the antimicrobial prescribing and stewardship competences.' A small video player thumbnail is shown with a 'Play' button. To the right of the session description is a box stating 'In partnership with' followed by the NHS Health Education England logo. At the bottom of the page, a footer states: 'e-LfH is a Health Education England Programme in partnership with the NHS and Professional Bodies'. The very bottom contains links for 'Terms and Conditions | Accessibility Statement | Site Map'.

<http://www.e-lfh.org.uk/programmes/antimicrobial-resistance/open-access-session/>

# Public Health England prescribing competencies

## Antimicrobial prescribing and stewardship competencies

### **Antimicrobial prescribing and stewardship (APS) competencies**

Developed by ARHAI<sup>1</sup> and PHE through an independent multi-professional development group.

#### The goal of the APS competencies

The goal is to improve the quality of antimicrobial treatment and stewardship and so reduce the risks of inadequate, inappropriate and ill-effects of treatment. This will improve the safety and quality of patient care, and make a significant contribution to the reduction in the emergence and spread of antimicrobial resistance. Antimicrobial stewardship is an important element of the UK five-year antimicrobial resistance strategy (1) and the Chief Medical Officer's annual report (2).

Competency 1: Infection prevention and control

Competency 2: Antimicrobial resistance and antimicrobials

Competency 3: Prescribing antimicrobials

Competency 4: Antimicrobial stewardship

Competency 5: Monitoring and learning

# NHS Education for Scotland resources

The screenshot shows the NHS Education for Scotland (HAI) website. The top navigation bar includes links for Home, About us, Education and training, Publications and resources, Recruitment, Newsroom, and Contact us, along with a search bar. The main header features the HAI logo and the text 'HEALTHCARE ASSOCIATED INFECTIONS' and 'Education for Infection Prevention and Control'. A breadcrumb trail indicates the current page is 'Antimicrobial Resistance and Stewardship'. The main content area is titled 'Antimicrobial Resistance and Stewardship' and features a sub-header 'Educational resources to support antimicrobial prescribing, resistance and stewardship within NHSScotland.' Below this, there is a section for 'Antimicrobial Resistance' with a paragraph of text and a link to the 'Scottish Management of Antimicrobial Resistance Action Plan (ScotMARAP) 2008'. A sidebar on the left contains a menu for 'Healthcare Associated Infections' with sub-items like 'Background', 'Scottish Infection Prevention and Control Education Pathway', and 'Educational Programmes', with 'Antimicrobial Resistance and Stewardship' selected. On the right, there is a 'Subscribe to our mailing list' form with an 'Email Address' field and a 'Subscribe' button.

Home About us **Education and training** Publications and resources Recruitment Newsroom Contact us Search here GO

## HEALTHCARE ASSOCIATED INFECTIONS

YOU ARE HERE: Home › Education and training › By theme / initiative › Healthcare Associated Infections › Educational Programmes › Antimicrobial Resistance and Stewardship

### HEALTHCARE ASSOCIATED INFECTIONS

## HAI

Education for Infection Prevention and Control

### Healthcare Associated Infections

- Background
- Scottish Infection Prevention and Control Education Pathway
- Educational Programmes**
  - Antimicrobial Resistance and Stewardship**
  - Cleanliness Champions
  - Decontamination of Reusable Medical Devices (Local and Endoscopy)
  - Domestic Services Education

## Antimicrobial Resistance and Stewardship

### Educational resources to support antimicrobial prescribing, resistance and stewardship within NHSScotland.

#### Antimicrobial Resistance

The scale of the threat of antimicrobial resistance (AMR) and the case for action was set out in the [Annual Report of the Chief Medical Officer](#) published in March 2013 and the [UK Five Year Antimicrobial Resistance Strategy 2013-18](#) sets out actions to address the key challenges to AMR.

In Scotland, the [Scottish Management of Antimicrobial Resistance Action Plan](#) (ScotMARAP) 2008, made recommendations for improving the use of antimicrobials across all healthcare settings as part of the broader Healthcare Associated Infection (HAI) Task Force Delivery Plan. ScotMARAP is led by [Scottish Antimicrobial Prescribing Group](#) (SAPG) and NES is represented to support educational developments in all aspects of antimicrobial stewardship for the administration, monitoring and prescribing of antimicrobial drugs.

#### Subscribe to our mailing list




\* indicates required

Email Address

Subscribe

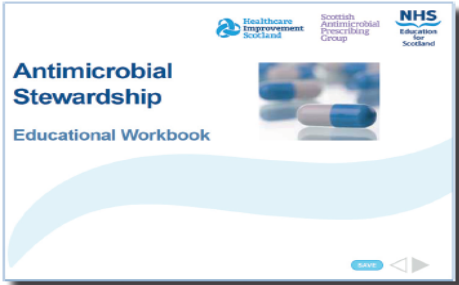
- ▶ Led by NHS Education for Scotland (NES) HAI team with input from NES Pharmacy team and links to other professions – GPs, dentists, psychologists

# NES open resources

## Antimicrobial Stewardship

Taking care of antibiotics  
The supporting role of the nurse  
and midwife



The vital role that nurses and midwives can play as part of the multidisciplinary approach to antimicrobial stewardship has been recognised in recent years and this has led to the development of an interactive educational resource.

The workbook allows learners to assess their current level of knowledge and identify potential development needs in each section of the workbook.

*Educational interactive and print version workbook is available to download from the NES website: <http://ow.ly/XG7EB>*

*For further information on the workbook please contact:*  
The NES HAI Team: [hai@nes.scot.nhs.uk](mailto:hai@nes.scot.nhs.uk)

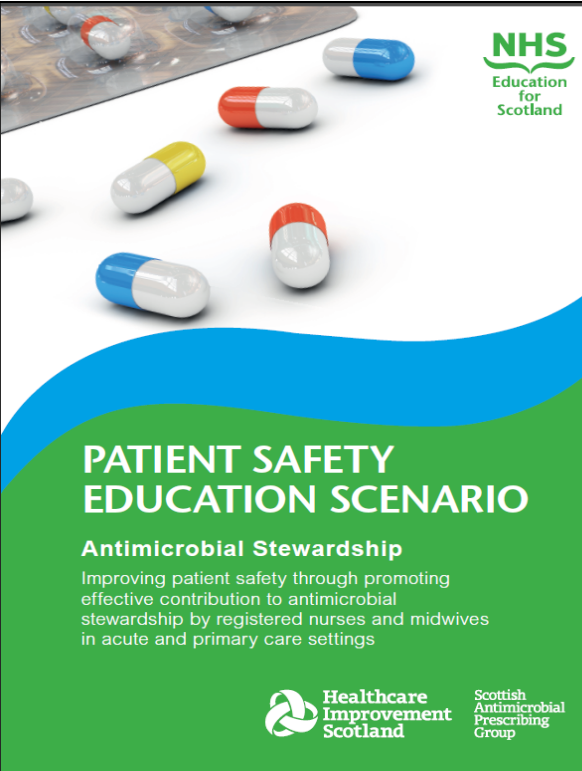
To discuss the Antimicrobial Stewardship Workbook where you work contact:




**Antibiotics - who's responsible?**  
from NES  2 years ago

 [+ Follow](#)

More from NES  
 Autoplay next video







## PATIENT SAFETY EDUCATION SCENARIO

### Antimicrobial Stewardship

Improving patient safety through promoting effective contribution to antimicrobial stewardship by registered nurses and midwives in acute and primary care settings

Content aimed at nurses and midwives in Scotland but suitable for all health and care staff as revision/introduction to key topics within stewardship

# Learning needs

- ▶ In designing an education programme it is important to find out the learning needs of the intended audience
- ▶ A simple survey or just asking people will help identify what the content should include to meet their gaps in knowledge
- ▶ Assessing learning needs will also inform the format required for the education – knowledge (facts), development of skills (practical tasks), application to practice (reflection), demonstration of competency (assessment process)
- ▶ When undertaking personal learning it is important to identify your own learning needs – what do I want to get from this learning?

# Learning styles

- ▶ In designing an education programme it is also important to acknowledge different learning styles
- ▶ Some people just want to gain knowledge through reading relevant materials and/or listening to lectures
- ▶ Others find that receiving some learning then applying it to practice works better
- ▶ Discussion with peers may be a helpful element for some learners
- ▶ Education programmes often use a 'blended learning' approach as this has a range of elements to appeal to all e.g. pre-reading, lecture/on-line content, practical task, discussion with tutor/other learners

# Education and behaviour change

- ▶ Education within hospital practice is often delivered to raise awareness of and provide information about local policies and procedures to be followed
- ▶ Therefore education aims to influence staff behaviour
- ▶ When areas for improvement are identified education then often aims to change behaviour
- ▶ It is widely acknowledged that changing behaviour is difficult and requires use of social science skills
- ▶ A recent Cochrane review of the literature on stewardship interventions in hospital concluded that *'The majority of the interventions do not use effective behaviour change techniques such as action planning or feedback'*.



# What is important for effective behaviour change?

- ▶ Culture within the organisation (hospital)
- ▶ Action plans and goals which are shared within a team
- ▶ Local champions and management support
- ▶ Setting standards for what behaviours are expected and about performance against these behaviours
- ▶ Team dynamics and priorities – hierarchies can prevent behaviour change

Also consider what might matter to an individual and persuade them to change:

- ❑ Why should I change my practice?
- ❑ What benefits are there for me?
- ❑ How will this benefit my patients?

# Knowledge into action

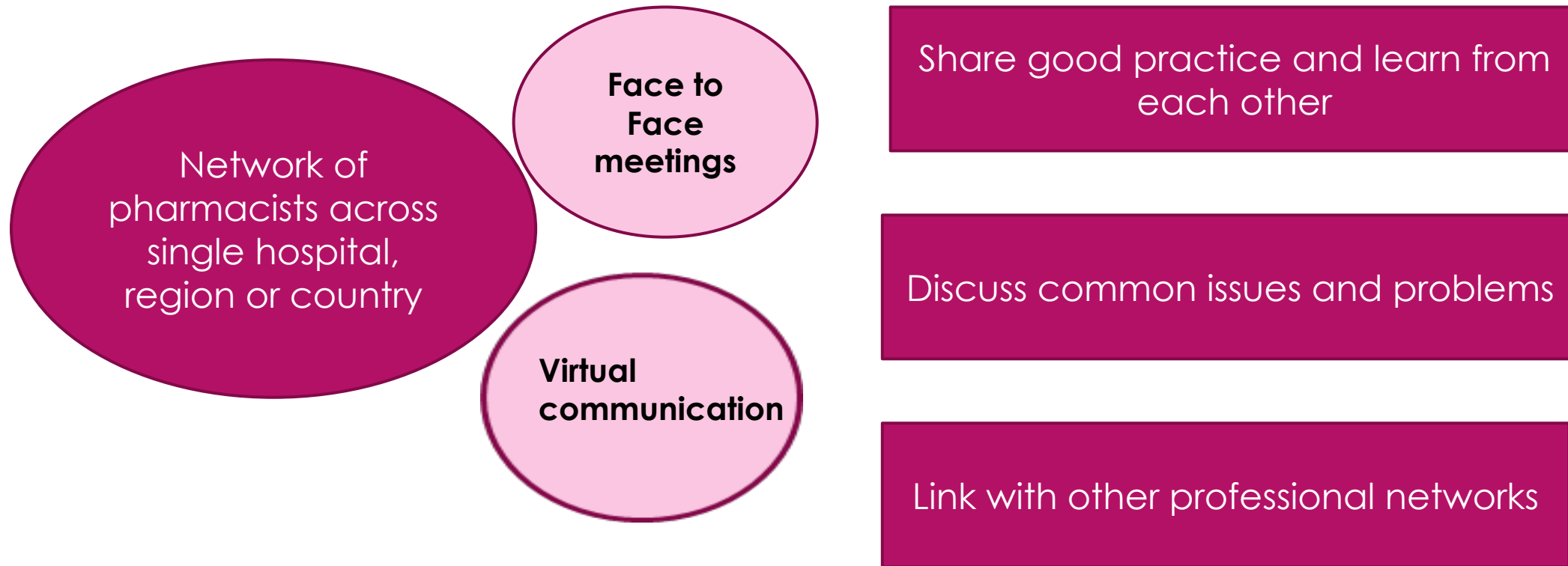
- ▶ Cochrane – education is an intervention to support stewardship.
- ▶ Education sessions should conclude with **action planning** – participants agree how they will apply their learning to their practice.
- ▶ May be helpful to keep in touch with other learners for peer support with delivering their actions.
- ▶ Follow-up is also important to assess whether actions have been carried out and whether any further learning is required to support their practice i.e. **feedback** on impact of learning.

# Stewardship champions

## **DEFINITION OF CHAMPION - a person who vigorously supports or defends a person or cause**

- ▶ Mandating stewardship – senior managers/hospital Board mandate stewardship
- ▶ Key opinion leaders within a hospital can influence peers – senior clinicians
- ▶ Antimicrobial Teams – multi-professional groups that can each influence their professional group
- ▶ ‘Link’ person in each ward – junior doctor, pharmacist or member of nursing staff as local lead for stewardship
- ▶ Infection control staff – raise awareness of stewardship as part of their role
- ▶ Patient safety staff – raise awareness of stewardship as a patient safety issue

# Pharmacist Networks to support stewardship



Network of pharmacists across single hospital, region or country

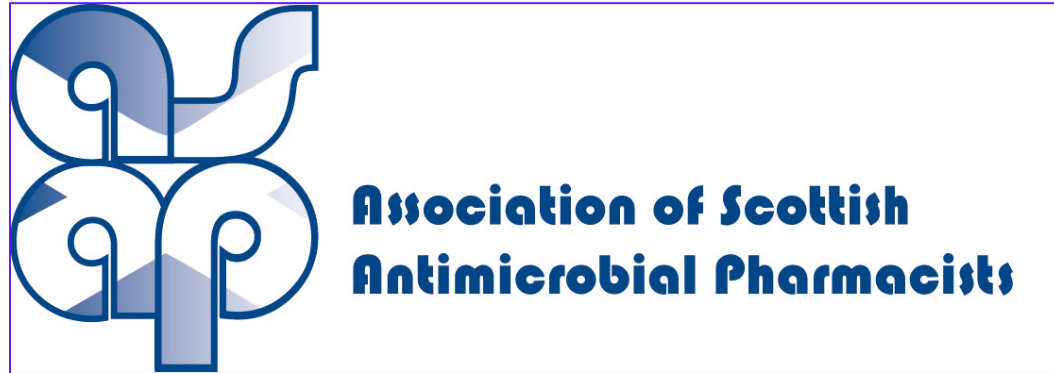
**Face to Face meetings**

Share good practice and learn from each other

**Virtual communication**

Discuss common issues and problems

Link with other professional networks



- ▶ National peer support group established in 2004 – now 25-30 members
- ▶ Support national stewardship work, share good practice and develop clinical specialty
- ▶ Annual work plan with **education** and research as key focus
- ▶ Links with two Schools of Pharmacy to support UG and Masters training
- ▶ Key achievements include:
  - development of Specialist Vocational training for pharmacists in Infection and Antimicrobial Stewardship
  - national pre-registration pharmacist study day (won UKCPA award)
  - national courses held in all regions for continuing professional development aimed at community pharmacists (2010 and 2015)



- ▶ National group of primary care pharmacists with Lead Pharmacist in each region
- ▶ Contribute to development of quality indicators in key areas of prescribing practice which reflect safe and cost effective prescribing
- ▶ Key support group for influencing primary care prescribers
- ▶ Involved in local Antimicrobial Management Teams
- ▶ Lead initiatives to share prescribing data and provide **education** on AMR with primary care teams
- ▶ Link to social care settings e.g. Care homes

# UK Clinical Pharmacy Association Pharmacy Infection Network

- ▶ Develop and lead on UK antimicrobial stewardship initiatives
- ▶ Provide an educational programme to enable the sharing of knowledge and allow networking opportunities
- ▶ Contribute to national advanced practitioner competency framework and national training programme
- ▶ Undertake research and support national and international collaboration with other infection societies
- ▶ To advise the Royal Pharmaceutical Society, Department of Health and other professional and government organisations on infection matters
- ▶ Overseas members encouraged

# UKCPA PIN key achievements



## INFECTION AND ANTIMICROBIAL STEWARDSHIP

### EXPERT PROFESSIONAL PRACTICE CURRICULUM

Professional curriculum to support members with  
the knowledge, skills, experience and behaviours  
to advance in their practice

2014

ROYAL PHARMACEUTICAL SOCIETY  
FACULTY

UKCPA  
CLINICAL PHARMACY ASSOCIATION



## Journal of Antimicrobial Chemotherapy

*J Antimicrob Chemother* 2015; **70**: 1277–1280  
doi:10.1093/jac/dku543 Advance Access publication 5 January 2015

### Development of an expert professional curriculum for antimicrobial pharmacists in the UK

Jacqueline Sneddon<sup>1\*</sup>, Mark Gilchrist<sup>2</sup> and Hayley Wickens<sup>3</sup>

<sup>1</sup>Scottish Antimicrobial Prescribing Group, Healthcare Improvement Scotland, Glasgow, UK; <sup>2</sup>Imperial College Healthcare NHS Trust, London, UK; <sup>3</sup>University Hospital Southampton NHS Foundation Trust, Southampton, UK

*Infect Dis Ther* (2015) 4 (Suppl 1):S51–S64  
DOI 10.1007/s40121-015-0080-z



#### REVIEW

### Antimicrobial Stewardship from Policy to Practice: Experiences from UK Antimicrobial Pharmacists

Mark Gilchrist · Paul Wade · Diane Ashiru-Oredope · Philip Howard ·  
Jacqueline Sneddon · Laura Whitney · Hayley Wickens



# UKCPA membership

UKCPA  
CLINICAL PHARMACY ASSOCIATION

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## Join - Learn - Connect

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Join today

Overseas membership includes access to discussion forums

<http://ukclinicalpharmacy.org/>



Joined  
8 years ago

12 posts

### Listeria prophylaxis following alemtuzumab treatment of multiple sclerosis

Fiona Robb - 28 Aug 2017 4:35pm

Dear All,

Does anyone have guidelines on the prevention of listeria infection following alemtuzumab treatment for multiple sclerosis?

Our neurology department are reviewing their guidelines following comments from the British Neurology Association. We are currently reviewing the evidence and discussing whether a 'listeria free' diet is sufficient or if patients require additional antimicrobial prophylaxis and if yes for what duration.

Many thanks

Fiona

# Public Campaigns to tackle AMR

Sign up for WHO updates

World Tuberculosis Day

World Health Day

World Immunization Week

World Malaria Day

World No Tobacco Day

World Blood Donor Day

World Hepatitis Day

World AIDS Day

World Antibiotic Awareness Week

## World Antibiotic Awareness Week

13-19 November 2017



### Antibiotic resistance

[Fact sheet on antibiotic resistance](#)

[Global action plan on antimicrobial resistance](#)

[How to stop antibiotic resistance? Here's a WHO prescription](#)

Antibiotic resistance is an increasingly serious threat to global health and human development. It is rising to dangerously high levels in all parts of the world, compromising our ability to treat infectious diseases and putting people everywhere at risk.

World Antibiotic Awareness Week aims to increase awareness of this important issue and to encourage best practices among the public, health workers, farmers, food producers, veterinarians and policy makers to avoid the further emergence and spread of antibiotic resistance.

[www.who.int/entity/campaigns/malaria-day/en/](http://www.who.int/entity/campaigns/malaria-day/en/)

Launched in 2015 to bring together and support several country-wide and Europe-wide campaigns

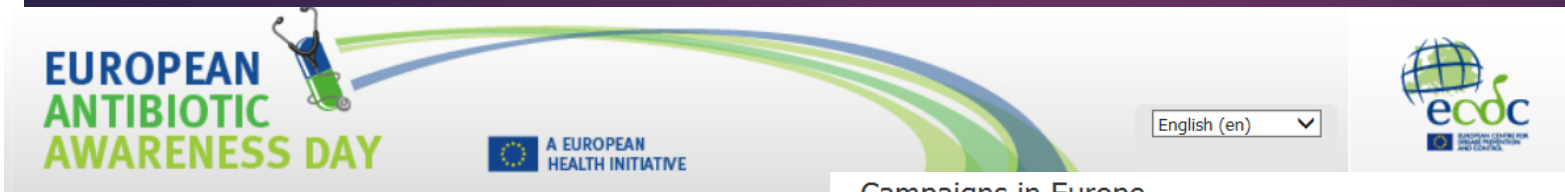
<http://www.who.int/campaigns/world-antibiotic-awareness-week/2017/event/en/>

# European Antibiotic Awareness Day (EAAD)

- ▶ Started in Europe in 2008, led by the European Centre for Disease Prevention and Control (ECDC)
- ▶ *The European Antibiotic Awareness Day is an annual European public health initiative that takes place on 18 November to raise awareness about the threat to public health of antibiotic resistance and the importance of prudent antibiotic use. The latest data confirms that across the European Union the number of patients infected by resistant bacteria is increasing and that antibiotic resistance is a major threat to public health.*
- ▶ *Prudent use of antibiotics can help stop resistant bacteria from developing and help keep antibiotics effective for the use of future generations.*

<http://antibiotic.ecdc.europa.eu/en/eaad/Pages/Home.aspx>

# European Antibiotic Awareness Day (EAAD)



- Plan a campaign
- For prescribers
- Get informed
- Get involved

- Do not self-medicate with antibiotics
- New infographic
- Patient stories
- Last-line antibiotics are failing**
- What is antibiotic resistance?



TWEET #EAAD2016  
[#EAAD2016 Tweets](#)

## Campaigns in Europe



A number of initiatives are taking place across Europe to spread the messages on the risks associated with inappropriate use of antibiotics and how to take antibiotics responsibly.

- Austria **NAP-AMR: Der österreichische Nationale Aktionsplan zur Antibiotikaresistenz**  
[http://www.bmg.gv.at/home/Schwerpunkte/Krankheiten/Antibiotikaresistenz/NAP\\_AMR\\_Der\\_oesterreichische\\_Nationale\\_Aktionsplan\\_zur\\_Antibiotikaresistenz](http://www.bmg.gv.at/home/Schwerpunkte/Krankheiten/Antibiotikaresistenz/NAP_AMR_Der_oesterreichische_Nationale_Aktionsplan_zur_Antibiotikaresistenz)
- Belgium **Gebruik antibiotica correct**  
<http://www.gebruikantibioticacorrect.be/nl>
- Belgium **Prenez les antibiotiques comme il faut**  
<http://www.usagecorrectantibiotiques.be/fr>
- Belgium **Antibiotics use them correctly and only when necessary!**  
<http://www.correctuseantibiotics.be/en#sthash.rXc2dJS0.dpuf>
- Croatia **HDKM: Europski dan svjesnosti o antibioticima**  
<http://www.hdkm.hr/>
- Czech Republic **Evropský antibiotický den (EAAD)**  
<http://www.szu.cz/evropsky-antibioticky-den-eaad>
- Denmark **Antibiotika eller ej**  
<http://www.antibiotikaellerej.dk/>
- Finland **Euroopan antibioottipäivä**  
<https://www.thl.fi/fi/web/infektioaudit/ajankohtaista/teemapaivat/euroopan-antibioottipaiiva>

<http://antibiotic.ecdc.europa.eu/en/eaad/Pages/Home.aspx>



# Antibiotic Guardian Campaign



- ▶ Started in 2014 by Public Health England, promoted throughout the UK and now in many other countries
- ▶ Healthcare professionals, animal health partners and the public engaged in awareness of antibiotic use and encouraged to make a personal pledge
- ▶ Data to date show that majority of those who have pledged are healthcare professionals or have links to them
- ▶ New approach needed to engage the public – ‘Keep Antibiotics Working’

<http://antibioticguardian.com/>

# Antibiotic Guardian Campaign

## Secondary Care Prescriber's Checklist Antibiotics

**HANDLE WITH CARE!**

–Overuse and incorrect use drives resistance

Do not start antibiotics in the absence of evidence of bacterial infection

**START SMART:**

- Obtain cultures prior to commencing therapy if appropriate
- Take a history to establish drug-related allergies
- If there is evidence/suspicion of bacterial infection, use local guidelines to initiate prompt effective antibiotic treatment
- Administer antimicrobial therapy within ONE hour of recognition of severe sepsis or septic shock
- Document indication(s), severity, route dose, and duration/review date for antibiotic prescription on prescription chart and in clinical notes
- Where antibiotics have been shown to be effective for surgical prophylaxis, give a single dose within 60 minutes before incision
- Consult infection expert(s) and/or pharmacists if appropriate

**THEN FOCUS:**  
At 48 – 72 hours; review the patient and make a clinical decision "the Antimicrobial Prescribing Decision" on the need for on-going antibiotic therapy.





Does patient's condition and/or culture result(s) necessitate:


- Stop of antibiotic therapy (if no evidence of infection)
- Switch from intravenous to oral therapy
- Change: de-escalation/substitution/addition of agents
- Continuation of current therapy
- Outpatient Parenteral Antibiotic Therapy (OPAT)

Document Decision & Next Review Date or Stop Date

Reference: Antimicrobial Stewardship Toolkit for Secondary Care: Start Smart – then Focus  
Available at: <https://www.gov.uk/government/publications/antimicrobial-stewardship-start-smart-then-focus>  
SSTF was developed by the Department of Health expert advisory committee on Antimicrobial Resistance and Healthcare Associated Infection (ARHAI) and Public Health England

Without effective antibiotics many routine operations like hip replacements, organ transplants, caesarean sections and treatments for sepsis or chemotherapy will become increasingly dangerous or impossible.

-  Over-use of antibiotics can lead to the development of drug-resistant bacteria which can cause serious infections.
-  Antibiotics can cause side effects such as rashes, thrush, stomach pains, diarrhoea, reactions to sunlight and other symptoms
-  Help conserve antibiotics so that they remain effective
-  Your actions can protect antibiotics, join us at [AntibioticGuardian.com](http://AntibioticGuardian.com)

 **PLEASE JOIN US**  
#antibioticguardian

 Choose your pledge now at [www.AntibioticGuardian.com](http://www.AntibioticGuardian.com) #antibioticguardian



**WITHOUT ANTIBIOTICS**

# Pledges for pharmacists

## SELECT A PLEDGE MESSAGE\*

*Messages will display below*

- **I will check that antibiotic prescriptions comply with local guidance and query those that do not**
- **Every time a customer presents with a self-limiting respiratory infection I will use the patient information leaflet to explain the potential duration of illness and how to treat their symptoms available at: [http://bit.ly/TARGET\\_patient\\_leaflets](http://bit.ly/TARGET_patient_leaflets)**
- **When handing out a prescription that includes antibiotics, I will inform the patients of dose and duration and to take their antibiotics exactly as prescribed and to return any unused antibiotics to a pharmacy for safe disposal**
- **When customers pick up an antibiotic prescription, I will encourage them to take the Antibiotic Guardian quiz online and to choose their own pledge to become Antibiotic Guardians**

# EAAD in Scotland

**EUROPEAN ANTIBIOTIC AWARENESS DAY**

**18 NOVEMBER**

ANTIBIOTIC GUARDIAN AND EAAD IS SUPPORTED BY:



**ANTIBIOTIC GUARDIAN**  
UK SUPPORT FOR EUROPEAN ANTIBIOTIC AWARENESS DAY



**NHS SCOTLAND**



**EUROPEAN ANTIBIOTIC AWARENESS DAY**  
A European Health Initiative

CHOOSE A PLEDGE AND JOIN THE ANTIBIOTIC GUARDIANS. RALLY TOGETHER AT [ANTIBIOTICGUARDIAN.COM](http://ANTIBIOTICGUARDIAN.COM)

**Stop Antibiotic Resistance**

Bacteria are becoming resistant to antibiotics. Keep antibiotics working for serious infections.

The best way to treat common colds, coughs or sore throats is plenty of fluids, rest and painkillers if needed, not antibiotics. For more information, or if you are worried, talk to your pharmacist or doctor



Find out how you can help at [Antibioticguardian.com](http://Antibioticguardian.com)



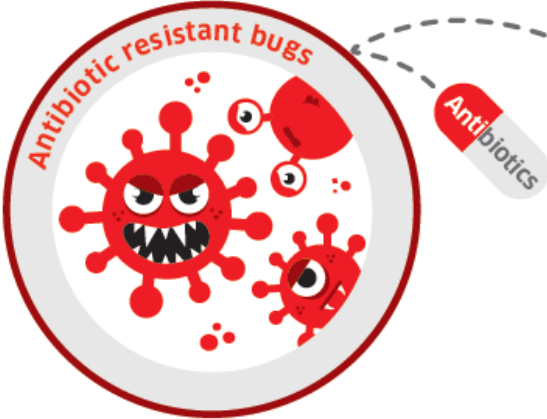
Healthcare Improvement Scotland



ANTIBIOTIC GUARDIAN



EUROPEAN ANTIBIOTIC AWARENESS DAY  
A European Health Initiative




**Antibiotic resistant bugs**

**Keep Antibiotics Working**


Taking antibiotics when you don't need them means they are less likely to work for you in the future.

The best way to treat common colds, coughs or sore throats is plenty of fluids, rest and painkillers if needed, not antibiotics. Colds and sore throats typically last about 7 days and coughs can last for up to 3 weeks. For more information, or if you are worried, talk to your pharmacist or doctor.


Find out how you can help at [Antibioticguardian.com](http://Antibioticguardian.com)



Healthcare Improvement Scotland



ANTIBIOTIC GUARDIAN



EUROPEAN ANTIBIOTIC AWARENESS DAY  
A European Health Initiative



# What information do patients and the public need?

- ▶ Self-limiting infections such as coughs, colds, sore throats do not require antibiotics and can be managed with rest, fluids and simple analgesics.
- ▶ The expected duration of common respiratory tract infections.
- ▶ Taking antibiotics when they are not needed can be harmful – unwanted side effects and risk of resistance. Common misunderstanding that the person becomes resistant to antibiotics rather than the bacteria.
- ▶ What to do if they feel more unwell and specific symptoms that may suggest a more serious infection.

# Useful resources for patients

Public Health England

## Treating your infection

Crystal Mark 20454  
Only approved by Plain English Campaign

It is recommended that you self-care

Your infection	Most are better by	How to treat yourself better for these infections, now and next time	When should you get help: Contact your GP practice or contact NHS 111 (England), NHS 24 (Scotland dial 111), or NHS Direct (Wales dial 0845 4647)
<input type="checkbox"/> Middle-ear infection	8 days	<ul style="list-style-type: none"> <li>Have plenty of rest.</li> <li>Drink enough fluids to avoid feeling thirsty.</li> <li>Ask your local pharmacist to recommend medicines to help your symptoms or pain (or both).</li> <li>Fever is a sign the body is fighting the infection and usually gets better by itself in most cases. You can use paracetamol if you or your child are uncomfortable as a result of a fever.</li> <li>Use a tissue and wash your hands well to help prevent spread of your infection to your family, friends and others you meet.</li> <li>Other things you can do suggested by GP or nurse:</li> </ul>	<p>1. to 8. are possible signs of serious illness and should be assessed urgently. Phone for advice if you are not sure how urgent the symptoms are.</p> <ol style="list-style-type: none"> <li>If you develop a severe headache and are sick.</li> <li>If your skin is very cold or has a strange colour, or you develop an unusual rash.</li> <li>If you feel confused or have slurred speech or are very drowsy.</li> <li>If you have difficulty breathing. Signs that suggest breathing problems can include:               <ul style="list-style-type: none"> <li>breathing quickly</li> <li>turning blue around the lips and the skin below the mouth</li> <li>skin between or above the ribs getting sucked or pulled in with every breath.</li> </ul> </li> <li>If you develop chest pain.</li> <li>If you have difficulty swallowing or are drooling.</li> <li>If you cough up blood.</li> <li>If you are feeling a lot worse.</li> </ol> <p>Less serious signs that can usually wait until the next available appointment:</p> <ol style="list-style-type: none"> <li>If you are not starting to improve a little by the time given in the 'Most are better by' column.</li> <li>In children with middle-ear infection: if fluid is coming out of their ears for more than 10 days or if they have new deafness.</li> <li>Other .....</li> </ol>
<input type="checkbox"/> Sore throat	7 - 8 days		
<input type="checkbox"/> Common cold	2 weeks		
<input type="checkbox"/> Sinusitis	2 weeks		
<input type="checkbox"/> Cough or bronchitis	3 weeks		
<input type="checkbox"/> Other infection: .....	..... days	.....	.....

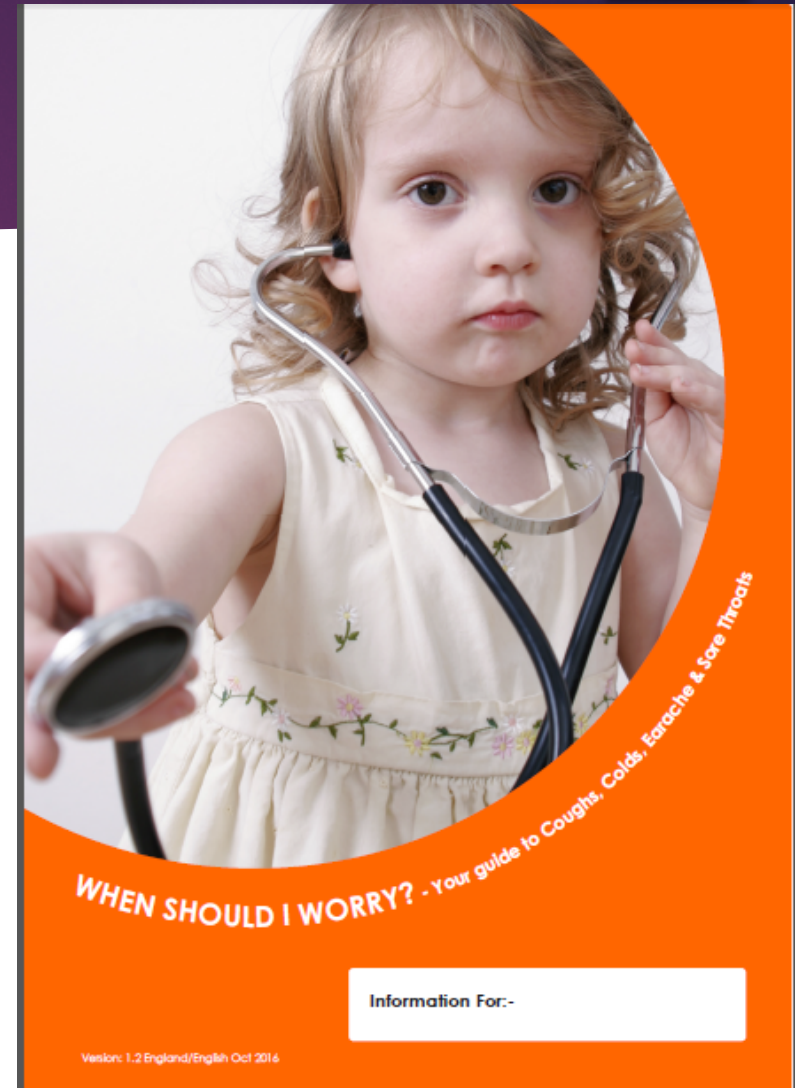
Back-up antibiotic prescription to be collected after  days only if you are not starting to feel a little better or you feel worse.  
Collect from:  Pharmacy  General Practice  GP, nurse, other  Book consultation

- Colds, most coughs, sinusitis, ear infections, sore throats, and other infections often get better without antibiotics, as your body can usually fight these infections on its own.
- If you take antibiotics when you don't need them, it allows bacteria to build up resistance. This means, they're less likely to work in the future, when you really might need them.
- Antibiotics can cause side effects such as rashes, thrush, stomach pains, diarrhoea, reactions to sunlight, other symptoms, or being sick if you drink alcohol with metronidazole.
- Find out more about how you can make better use of antibiotics and help keep this vital treatment effective by visiting and pledging at [www.antibioticguardian.com](http://www.antibioticguardian.com)

Never share antibiotics and always return any unused antibiotics to a pharmacy for safe disposal

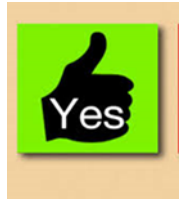
Developed in collaboration with these professional societies:

Version 6. Published: May 2017. Review date: May 2020.

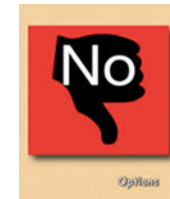


# Questions about education and engagement in antimicrobial stewardship

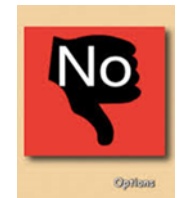
❖ Education of healthcare professionals is an important aspect of tackling AMR



❖ Healthcare staff will learn most about AMR through attending lectures



❖ Antibiotic awareness campaigns should only target patients and the public





THANKS FOR LISTENING

ANY QUESTIONS

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